Section 16 - West Colorado River Basin Federal Water Planning and Development

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Section 16

West Colorado River Basin - Utah State Water Plan

Federal Water Planning and Development

16.1 Introduction

This section provides a brief description of each agency's programs and how they impact the resources of the West Colorado River Basin.

Although the activities of federal agencies are changing, many programs are still available to the local people for their betterment and the enhancement of their resources. This section gives an insight to the program functions and how they can be accessed. This will also help improve the working relationships between the local entities, individuals and the federal government.

16.2 Background

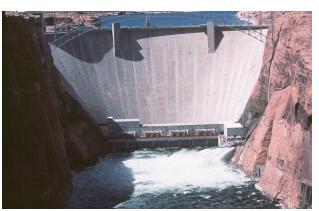
With the continual downsizing of the federal government in the natural resources fields, there are decreases in financial and technical assistance in most agency programs. This process is also passing the responsibility to local and state governments to carry out many of these programs without providing funding. Along with this, the federal standards for resources use are higher, adding to the total cost.

16.3 Federal Concerns

Four concerns of federal agencies were identified in the *1990 State Water Plan*. These concerns were: 1) Reserved water rights, 2) interrelated planning, 3) stream and riparian habitat loss, and 4) water rights filings. All of these apply to the West Colorado River Basin.

One other concern has been raised since the *State Water Plan* was published. This is the lack of coordination between federal, state and local officials during the planning and implementing of

Federal involvement at the local level is becoming more oriented toward the management, conservation and preservation of natural resources with fewer programs promoting natural resources development



Glen Canyon Dam

various programs and projects. This basin plan could be a mechanism to help with coordination.

16.4 Federal Programs and Projected Planning and Development

The various federal agencies and the programs they can provide are briefly described on the following pages. (Also see Section 8). Some projected planning and implementation being considered by various agencies are also discussed.

16.4.1 Bureau of Land Management

The Federal Land Policy and Management Act gives the Bureau of Land Management (BLM) authority for inventory and comprehensive planning for all public lands and resources under its jurisdiction. This includes water resources with the mandate to comply with applicable laws. They are also responsible for managing the existing and proposed wilderness areas, wild and scenic rivers, and all recreational uses associated with these rivers.

Water resources, in quantity and quality, are key factors in managing all terrestrial and aquatic resources on public lands. Water resources are often small and dispersed sources. Water sources on public lands are rapidly becoming a major determinant of resources management alternatives. The BLM manages riparian habitats of springs, seeps, streams, lakes, reservoirs and ponds to help provide high quality water resources for beneficial downstream uses.

Collection of water resources quantity and quality data is needed for all programs. The BLM is also responsible for planning the use of these resources on the public lands in coordination with state and other agencies. All of these data become a part of a draft "resource management plan" (RMP) for a given area. After public input, these become management plans for resources on BLM administered land. The published *Escalante Resource Management Plan* covers part of the West Colorado River Basin. The Bureau of Land Management will manage the Grand Staircase-Escalante National Monument and is currently working on a monument management plan.

16.4.2 Bureau of Reclamation

The Bureau of Reclamation built the Emery and Narrows (Scofield) projects in Emery and Carbon counties. Four broad categories of water resources programs administered by the Bureau of Reclamation are investigations, research, loans and service, all requiring close cooperation with the concerned entities.

Investigation Programs - General investigations are conducted for specific and



Joes Valley Reservoir in Emery County

multipurpose water resources projects. These include an environmental assessment.

Research Programs - Reclamation conducts research on water-related design; construction; materials; atmospheric management; and wind, geothermal and solar power. Most programs are conducted in cooperation with other entities.

Loan Programs - These programs provide federal loans and assistance to qualified organizations wishing to construct or improve smaller and generally less complex water resources development.

Service Programs - These are intergovernmental specialized technical service programs designed to provide data, technical knowledge and expertise to states and local government agencies to help avoid duplication of special service functions. Local governments pay for requested services.

16.4.3 Cooperative State Research, Education, and Extension Service

This agency will be assigned responsibility for all cooperative state and other research programs presently performed by the Cooperative State Research Service, all cooperative education and extension programs presently performed by the Extension Service, and such other functions related to cooperative research, education and extension as may be assigned.

16.4.4 Corps of Engineers

If local interests are unable to cope with a large water resources problem, they may petition the Corps or, for larger projects, petition their congressional representatives for assistance. Requests for assistance with smaller problems may be made directly to the Corps of Engineers. This allows the Corps to investigate the economic and technical feasibility and social and environmental acceptability of remedial measures. When the directive covers an entire river basin, it is studied as a unit and a comprehensive plan is developed. Close coordination is maintained with local interests, the state and other federal agencies.

The Corps of Engineers can also participate in environmental stream and river restorations. These can include the restoration of fish and wildlife habitat, wetland and meander restoration, restoration of riparian areas, and stabilization of riverbanks and riverbed. These projects are cost shared with a local sponsor. The Corps also has authority under its Flood Plain Management Services Program to delineate areas of potential flood and debris flow threats for local communities at no charge.

16.4.5 Environmental Protection Agency

Environmental Protection Agency programs dealing with water resources include the safe drinking water program under the Federal Safe Drinking Water Act and the water pollution control program under the Clean Water Act. Several noteworthy aspects of the Clean Water Act include the following:

National Pollutant Discharge Elimination System (NPDES) - The NPDES program (Clean Water Act, Section 402) regulates the discharge of point sources of pollutants to waters of the United States.

Construction Grants - This program originally provided grant funds for construction of needed municipal wastewater treatment facilities. It was phased out in 1990 and replaced with a revolving loan fund managed by the state.

Water Quality Management Planning and Non-point Source Pollution Control - Section 205(j) of the Clean Water Act provides funds to states to carry out water quality management planning. Section 319 of the act authorizes funding for implementation of non-point source pollution control measures under state leadership.

16.4.6 Farm Service Agency

The Farm Service Agency (FSA) administers farm commodity, crop insurance, and conservation programs for farmers and ranchers. As of October 1995, the FSA also administers the farm ownership and operating loans formerly provided by the Farmers Home Administration. The Agricultural Conservation Program (ACP) and the Emergency Conservation Program (ECP) have been replaced by other programs in other agencies. Elements of these programs have been transferred to the Natural Resources Conservation Service. Two programs administered by the FSA are water-related. They are the Conservation Reserve Program (CRP) and the Flood Risk Reduction Program (FRR).

The Conservation Reserve Program reduces soil erosion, protects the nation's ability to produce food and fiber, reduces sedimentation in streams and lakes, improves water quality, establishes wildlife habitat, and enhances forest and wetland resources. It encourages farmers to convert highly erodible cropland or other environmentally sensitive acreage to vegetative cover, such as tame or native grasses, wildlife plantings, trees, filterstrips, or riparian buffers. Farmers receive an annual rental payment for the term of the multi-year contract. Cost sharing is provided to establish the vegetative cover practices.

The Flood Risk Reduction Program was established to allow farmers who voluntarily enter into contracts to receive payments on lands with high flood potential. In return, participants agree to forego certain U.S. Department of Agriculture program benefits. These contract payments provide incentives to move farming operations from frequently flooded land.

16.4.7 Federal Emergency Management Agency

Federal Emergency Management Agency (FEMA) programs are related to disaster preparedness, assistance and mitigation. The agency

provides technical assistance, loans and grants.

Presidential Declared Disaster - After a presidential declaration of a major disaster, usually after a state request, grants are available to state and local governments for mitigation of disaster related damage.

Assistance Grants - The FEMA can provide grants on a matching basis to help the state develop and improve disaster preparedness plans and develop effective state and local emergency management organizations. Also, grants are available to develop earthquake preparedness capabilities.

Flood Plain Management - The FEMA provides technical assistance to reduce potential flood losses through flood plain management. This includes flood hazard studies to delineate flood plains, advisory services to prepare and administer flood plain management ordinances, and assistance in enrolling in the National Flood Insurance Program. The FEMA can also assist with the acquisition of structures in the flood plain subject to continual flooding.

16.4.8 Fish and Wildlife Service

The U. S. Fish and Wildlife Service (USFWS) is responsible for achieving part or all of the mandates of the Endangered Species Act, Fish and Wildlife Coordination Act, Clean Water Act and Migratory Bird Treaty Act. No land or water areas in the basin are directly managed by the USFWS.

Table 16-1 lists the species considered threatened or endangered and which occur in the West Colorado River Basin. This list can change over time as other species are added when they become threatened or species are removed when they recover. When any activity is planned that may impact a threatened or endangered species, it is the responsibility of the sponsor to take actions to protect them.

The USFWS compiles lists of animal and plant species native to the United States that are being reviewed for possible addition to the List of Endangered and Threatened Species. Such species are generally referred to as candidates. The West Colorado River Basin contains no candidate species.

Table 16-1 Threatened or Endangered Species

Humpback Chub
Bonytail Chub
Colorado Pikeminnow
Razorback Sucker
California Condor
Bald Eagle
Peregrine Falcon
Mexican Spotted Owl
Southwestern Willow Flycatcher
Utah Prairie Dog

Source: Utah Division of Wildlife Resources

When rights-of-way permits are required on federal lands, the consultation requirement under the Fish and Wildlife Coordination Act is actuated. If federal funds are involved, Section 7 consultation with the USFWS is required by the Federal Endangered Species Act (Also see Section 14). The Section 404 permitting process of the Clean Water Act administered by the Corps of Engineers calls for U.S. Fish and Wildlife Service response on impacts to wetlands as well as threatened or endangered species.

Under the Migratory Bird Treaty Act, all birds are protected with the exception of starlings, English sparrows and pigeons. Any unpermitted activity on any land that results in "take" of federally listed species constitutes violation of Section 9 of the Endangered Species Act. "Take" under the act is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or to attempt to engage in any such conduct." This can include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

16.4.9 Forest Service

Water-related programs of the Forest Service include watershed management; special use authorization for water development projects; and coordination with local, state and federal agencies.

They also manage wilderness areas located on national forest lands.

Watershed Management - Watershed protection insures that activities do not cause undue soil erosion and stream sedimentation, reduce soil productivity or otherwise degrade water quality. Water yields may be affected primarily through snowpack management as a result of timber harvest using well-planned layout and design. Potential increases may approach one-half acre-foot per acre for some treated areas, but multiple-use considerations and specific on-site conditions may limit actual increases.

Special Use Authorization - Construction and operation of reservoirs, conveyance ditches, hydropower facilities and other water resources developments require special use authorization and usually an annual fee. Authorization contains conditions necessary to protect all other resources use. Coordination of water developments by others requires communication early in the planning process to guarantee environmental concerns are addressed.

The Forest Service has prepared draft EISs and land and resource management plans for the Dixie and Fishlake national forests. Final plans will be published after public comment.

16.4.10 Geological Survey

The U.S. Geological Survey (USGS), through its Water Resources Division (WRD), investigates the occurrence, quantity, distribution, and movement of surface water and groundwater and coordinates federal water data acquisition activities. This is accomplished through programs supported by the USGS, independent of or in cooperation with, other federal and non-federal agencies.

The USGS manages continuing programs in cooperation with various state agencies. These include water quality and water level changes in the West Colorado River Basin groundwater reservoirs. They also read and evaluate surface water stream gages.

16.4.11 National Park Service

The National Park Service (NPS) was

established in 1916 to promote and regulate the use of national parks, monuments and similar reservations to "conserve the scenery and the natural historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." (39 Stat. 535; 16 U.S. Code 1). The long-range objectives of the NPS are as follows.

- 1. Conserve and manage the parks for their highest purpose; the natural, historical and recreational resources.
- 2. Provide the highest quality of use and enjoyment by increased millions of visitors.
- 3. Develop the parks through inclusion of additional areas of scenic, scientific, historical and recreational value.
- 4. Communicate the cultural, natural, inspirational and recreational significance of the American heritage.

In fulfillment of these objectives, NPS performs the following functions.

- Manages Capitol Reef National Park and portions of Canyonlands National Park, Bryce Canyon National Park, and Glen Canyon National Recreation Area in the West Colorado River Basin.
- Conducts the recreational aspects of water project implementation studies.
- Conducts congressionally authorized Wild and Scenic River and National Historic and Scenic Trail studies.
- Through cooperative agreements, administers recreation on lands under the jurisdiction of other federal agencies.
- Provides professional and administrative support to the national, regional and park advisory boards.

In federal water resources project preauthorization studies, the NPS may provide technical assistance in general development planning. In post-authorization studies, it may provide technical assistance in development planning; site planning; consultation pertaining to the development, interpretation and operation of recreations areas; management planning; negotiation of agreements for administration of reservoir recreation areas; and follow-up on the administration of such agreements.

Glen Canyon Adaptive Management Work

Group - The Grand Canyon Protection Act (Act) of October 30, 1992, embodied in Public Law 102-575, directs the Secretary of the Interior, among others, to operate Glen Canyon Dam in accordance with the additional criteria and operating plans specified in Section 1804 of the act and to exercise other authorities under existing law in such a manner as to protect, mitigate adverse impacts to, and improve the values for which Grand Canyon National Park and the Glen Canyon National Recreation Area were established, including but not limited to the natural and cultural resources and visitor use.

As part of long-term monitoring, the Secretary's Record of Decision (ROD) mandates development and initiation of an Adaptive Management Program (AMP). The AMP provides for monitoring the results of the operating criteria and plans adopted by the interior secretary and changes to those operating criteria and plans. The AMP includes an Adaptive Management Work Group (AMWG).

16.4.12 Natural Resources Conservation Service

The National Resources Conservation Service (NRCS) provides technical and financial assistance to conserve soil, water and related resources on nonfederal land through local soil conservation districts. In addition to working with individual landowners and units of government, the NRCS administers programs to inventory existing soil and snow pack conditions, protect watersheds, and to plan for flooding and drought events.

Soil Surveys - Published soil surveys contain descriptions of an area's soils, their use and management, and maps depicting the extent of these soils. Several soil surveys have been completed in Carbon and Emery counties and in the eastern area of Wayne and Garfield counties.

Snow Surveys - Through the snow survey program, the NRCS measures snow water equivalent and precipitation at either a manually measured snow course station or at a SNOTEL site which can be accessed electronically. See Section 3, Table 3-4, for a listing of snow course and SNOWTEL sites in the West Colorado River Basin.

Environmental Quality Incentives Program (EOIP) - The Environmental Quality Incentives Program provides technical, educational and financial assistance to eligible farmers and ranchers to address soil, water and related natural resources concerns on their lands in an environmentally beneficial and cost-effective manner. The program provides assistance to farmers and ranchers in complying with federal, state and tribal environmental laws, and encourages environmental enhancement. The program is funded through the Commodity Credit Corporation. The purposes of the programs are achieved by cost-sharing the implementation of a conservation plan, which includes structural, vegetative and land management practices on eligible land. Fifty percent of the funding will be targeted at natural resources concerns relating to livestock production, primarily in priority areas.

Watershed and River Basin Planning and Installation - Technical and financial assistance is provided in cooperation with local sponsoring organizations, state and other public agencies to voluntarily plan and install watershed-based projects on private lands. The program empowers local people or decision makers, builds partnerships, and requires local and state funding contributions. The purposes of watershed projects include watershed protection; flood prevention; water quality improvements; soil erosion reduction; rural, municipal and industrial water supply; irrigation water management; sedimentation control; fish and

wildlife habitat enhancement; and creation and restoration of wetlands and wetland functions.

Section 3 of Public Law 83-566 provides for assisting sponsoring local organizations to develop a plan on watershed not exceeding 250,000 acres. During planning, problems such as water quality, flooding, water and land management, and sedimentation are evaluated and works of improvement are proposed to alleviate problems. The resulting watershed plans estimate benefits, costs, cost-sharing rates, and arrange for operation and maintenance necessary to justify federal assistance to install works of improvement.

Section 6 of Public Law 83-566 provides for cooperation with federal, state and local agencies in making investigations and surveys of river basins as a basis for development of coordinated water resource programs. Reports of the investigations and surveys serve as guides for the development of water, land and related resources in agricultural, rural and urban areas within upstream watershed settings. They also serve as a basis for coordination with major river systems and other phases of water resource management and development. One project (Ferron) has been completed under the Watershed Protection and Flood Prevention Act (Public Law 83-566), as amended (See Section 9).

The Emergency Watershed Protection Program (EWP) was set up by Congress to respond to emergencies created by natural disasters. It is designed to relieve imminent hazards to life and property caused by floods, fires, windstorms and other natural occurrences. The purpose of EWP is to help groups of people with a common problem. It is generally not an individual assistance program. All projects undertaken must be sponsored by a political subdivision of the state, such as a city, county, general improvement district or conservation district.

Wetlands Reserve Program - The Wetlands Reserve Program is a voluntary program offering landowners the opportunity to protect, restore and enhance wetlands on their property. The NRCS provides technical and financial support to help landowners with their wetland restoration efforts. The goal is to achieve the greatest wetland functions

and values, along with optimum wildlife habitat, on every acre enrolled in the program. This program offers landowners an opportunity to establish langterm conservation and wildlife practices and protection.

Resource Conservation and Development Program - The purpose of the Resources Conservation and Development (RC&D) Program is to accelerate the conservation, development and utilization of natural resources, improve the general level of economic activity, and enhance the environment and standard of living in authorized RC&D areas. It improves the capacity of state, tribal and local units of government, and local nonprofit organizations in rural areas to plan, develop and accomplish programs for resource conservation and development. The program also establishes or improves coordination systems in rural areas. Current program objectives focus on improving the quality of life through natural resources conservation and community development which leads to sustainable communities, prudent use (development), and the management and conservation of natural resources. The NRCS can provide grants for land conservation, water management, community development and environmental needs in authorized RC&D areas. The West Colorado River Basin contains portions of the Color Country RC&D, Panoramaland RC&D and Castleland RC&D project areas.

16.4.13 Rural Development

Rural Development provides financial assistance for water and waste disposal facilities in rural areas and towns of up to 10,000 people. Priority is given to public entities in areas smaller than 5,500 people to restore, improve or enlarge a water supply or waste disposal facility. Eligibility for loans and grants requires water or waste disposal systems must be consistent with state and subdivisions development plans and regulations. Rural Development also makes loans for resource conservation and development projects.